

Notice of Allowability

Application No.

09/896,887

Examiner

Wen-Tai Lin

Applicant(s)

KRAUTKREMER, TODD JOSEPH

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 1/14/05 and telephone interview held on 4/8/05.
2. ☒ The allowed claim(s) is/are 1-12, 14, 16-25 and 27-31, renumbered as 1-28.
3. ☒ The drawings filed on 28 June 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Wen-Tai Lin
4/20/05

EXAMINER'S AMENDMENT

1. An examiner's Amendment to the record appears below. Should the changes and/or additions be unacceptable, an amendment may be filed as provided by 37 C.F.R. 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the Issue Fee.
2. Authorization for the examiner's amendment was given in a telephone interview with Mr. Mark J. Spolyar, reg. no. 42164, on April 8, 2005.
3. In the claims:
 - i. Please cancel claims 13, 15 and 26.
 - ii. Please replace claims 1, 16-17, 23-25, 27-28 and 30 to the following:
 1. (currently amended) A system allowing for centralized, network application performance management services, comprising:
 - a wide area network maintained by a network service provider,
 - a customer site comprising a first network,
 - an access link between the wide area network and the first network of the customer site,
 - a managed network operations center operably connected to the wide area network, the managed network operations center operative to monitor the wide area network,
 - and, a bandwidth management device, residing at the customer site, and operably connected to the access link;

wherein the bandwidth management device is operable to monitor network traffic traversing the access link in relation to bandwidth utilization and application performance and transmit data related to the network traffic to the managed network operations center;

wherein the bandwidth management device is operable to control the outbound and inbound flow of network traffic across the access link based on a set of bandwidth management policies; and,

wherein the managed network operations center is operable to apply to the bandwidth management device a set of bandwidth management policies based on application performance priorities received from the customer site;

wherein the bandwidth management device comprises a customer portal facilitating configuration of the set of bandwidth management policies, and wherein the managed network operations center comprises a device manager server operative to receive configuration requests from the customer site and configure the set of bandwidth management policies on the bandwidth management device via the customer portal;

and wherein the managed network operations center is operative to maintain a division between the bandwidth management policies configurable by the customer site and the bandwidth management policies configurable by the network service provider.

16. (currently amended) A system allowing for centralized, network application performance management services deployed over a service provider network to a customer site, comprising:

an access link between the service provider network and the customer site,
a managed network operations center operably connected to and monitoring the service provider network, and

a bandwidth management device, residing at the customer site, and operably connected to the access link;

wherein the bandwidth management device is operable to monitor network traffic traversing the access link in relation to bandwidth utilization and application performance and transmit data related to the network traffic to the managed network operations center;

wherein the managed network operations center is operable to receive application performance priorities from the customer site and apply a set of bandwidth management policies based on the priorities to the bandwidth management device; and

wherein the bandwidth management device is operable to control the outbound and inbound flow of network traffic across the access link based on the set of bandwidth management policies;

wherein the bandwidth management device comprises a customer portal facilitating configuration of the set of bandwidth management policies, and wherein the managed network operations center comprises a device manager server operative to receive configuration requests from the customer site and configure the set of bandwidth management policies on the bandwidth management device via the customer portal;

and wherein the managed network operations center is operative to maintain a division between the bandwidth management policies configurable by the customer site and the bandwidth management policies configurable by the network service provider.

17. (currently amended) A method allowing for centralized application performance management services at a managed network operations center to a customer site, wherein the customer site is operably connected to a service provider network via an access link, the method comprising the steps of:

deploying a bandwidth management device at the customer site on the access link; wherein the bandwidth management device is operable to transmit data to and receive data from the managed network operations center, and wherein the bandwidth management device is operable to control the inbound and outbound flow of network traffic across the access link based on a set of bandwidth management policies; wherein the bandwidth management device further comprises a configuration portal facilitating configuration of the set of bandwidth management policies;

profiling with the bandwidth management device(s) the network traffic across the access link to identify bandwidth consumption of network applications;

receiving from the customer site a prioritization of applications based on the profiled network traffic;

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applying, to the bandwidth management device via the configuration portal, a set of bandwidth management policies for controlling network traffic traversing the access link based on the prioritization received from the customer site; and

monitoring, at a managed network operations center, application performance to assess compliance with the prioritization received from the customer site; and

maintaining a division between the bandwidth management policies configurable by the customer site and the bandwidth management policies configurable by the network service provider.

23. (currently amended) A method enabling centralized application performance management services, wherein the services are provided by a managed network operations center operably connected to a service provider network, and wherein the services are provided to at least one ~~customer~~ enterprise site connected to the service provider network via a transmission link, the transmission link including a bandwidth management device residing at the ~~customer~~ enterprise site, and operable to monitor network traffic in relation to bandwidth utilization and application performance and transmit data related to the network traffic to the managed network operations center; wherein the bandwidth management device is operable to control outbound and inbound network traffic across the transmission link based on a set of bandwidth management policies, and wherein the bandwidth management device comprises a configuration portal facilitating configuration of the set of bandwidth management policies, and wherein the managed network operations center comprises a device manager server operative to receive configuration requests from the enterprise site and configure the set of bandwidth management policies on the bandwidth management device via the configuration portal, the method comprising the steps of:

receiving, at the managed network operations center, a request to change a bandwidth management policy from the ~~customer~~ enterprise site;

applying a new set of bandwidth management policies to the bandwidth management device based on the requested change; and

maintaining a division between the bandwidth management policies configurable by the enterprise site and the bandwidth management policies configurable by the network service provider.

24. (currently amended) The method of claim 23 further comprising the step of authenticating a user associated with the ~~customer~~ enterprise site, before applying the new set of bandwidth management policies.

25. (currently amended) The method of claim 23 wherein the applying step comprises the steps of

formulating a new set of bandwidth management policies based on the desired change received from a user associated with the ~~customer~~ enterprise site; and,

transmitting the new set of bandwidth management policies to the bandwidth management device.

27. (currently amended) An apparatus enabling the provision of centralized application performance management services to a plurality of enterprise sites ~~enterprises~~, comprising a plurality of bandwidth management devices each corresponding to a respective customer enterprise site;

a device manager server operably connected to the bandwidth management devices; wherein the bandwidth management devices are each deployed at respective ones of the ~~customer~~ enterprise sites, and are operable to monitor network traffic on respective access links between the ~~customer~~ enterprise sites and a service provider network in relation to bandwidth utilization and application performance and transmit data related to the network traffic to the device manager server;

wherein the bandwidth management devices are further operable to control outbound and inbound network traffic across the access links based on bandwidth management policies; wherein the bandwidth management devices each comprise a configuration portal facilitating configuration of the set of bandwidth management policies; and,

wherein the device manager server is operable to receive application performance priorities for access links corresponding to ~~customer~~ enterprise sites and apply, via the configuration portals, a set of bandwidth management policies implementing the priorities to corresponding bandwidth management devices; and wherein the device manager server is operative to maintain a division between the bandwidth management policies configurable by the enterprise site and the bandwidth management policies configurable by the network service provider.

28. (currently amended) The apparatus of claim 27 further comprising a network traffic database storing network traffic data corresponding to a plurality of bandwidth management devices; and

wherein the device manager server is operable to store in the network traffic database network traffic data received from the bandwidth management devices in association with the corresponding ~~customer~~ enterprise sites.

30. (currently amended) A system allowing for centralized, network application performance management services, comprising:

a service provider network,

a customer site associated with an enterprise customer, the customer site comprising a second network and a routing device,

an access link between the service provider network and the routing device of the customer site,

wherein the routing device is operably connected to the second computer network to route data between the service provider network and the second network,

a managed network operations center operably connected to the service provider network, the managed network operations center monitoring the access link between the service provider network and the second network of the customer site,

and, a bandwidth management device, residing at the customer site between the second network and the routing device, and operably connected to the access link;

wherein the bandwidth management device is operable to monitor network traffic on the access link in relation to bandwidth utilization and application performance and transmit data related to the network traffic to the managed network operations center;

wherein the bandwidth management device is operable to control outbound and inbound network traffic traversing the access link based on a set of bandwidth management policies; and,

wherein the managed network operations center is operable to apply to the bandwidth management device a set of bandwidth management policies based on application performance priorities received from the customer site; and

wherein the managed network operations center is operable to manage a plurality of bandwidth management devices across a plurality of enterprise customers, wherein each enterprise customer has associated therewith at least one of the plurality of bandwidth management devices;

wherein the bandwidth management device comprises a customer portal facilitating configuration of the set of bandwidth management policies, and wherein the managed network operations center comprises a device manager server operative to receive configuration requests from the customer site and configure the set of bandwidth management policies on the bandwidth management device via the customer portal; and wherein the managed network operations center is operative to maintain a division between the bandwidth management policies configurable by the customer site and the bandwidth management policies configurable by the network service provider.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wen-Tai Lin whose telephone number is (571)272-3969. The examiner can normally be reached on Monday-Friday (8:00-5:00) .

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571)272-3964. The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

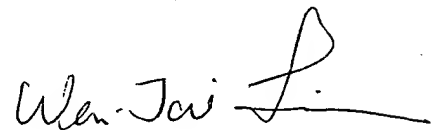
(703)872-9306 for official communications; and

(571)273-3969 for status inquires draft communication.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Wen-Tai Lin

April 20, 2005


4/20/05